Devbox Nix dev environments

START HERE

`devbox` **`init`**
Create devbox.json

`devbox` **`services up`**
Start services

`devbox` **`add`** *`<pkg>`*
Add a package

`devbox` **`rm`** *`<pkg>`*
Remove a package

`devbox` **`shell`**
Enter the environment

`devbox` **`run`** *`<script>`*
Run a script

`devbox` **`search`** *`<pkg>`*
Find packages

`devbox` **`update`**
Refresh versions

devbox.json packages, env, scripts → `devbox add` → **devbox.lock** pinned versions → `devbox shell` → **Nix store** installed packages → `PATH` → **Shell** isolated tools

CONCEPTS

devbox.json lists the packages a project needs; devbox.lock pins exact versions. Commit both so everyone gets the same tools.

Devbox wraps Nix: you get reproducible packages without writing Nix code. Nix itself is installed for you on first use.

Flags of devbox run must come before the script or command name.

PROJECT SETUP

`devbox` **`init`**
Create devbox.json in this directory

`devbox` **`add`** *`<pkg>`*
Add a package to the project

`devbox` **`add`** *`<pkg>`*`@`*`<version>`*
Add a specific version

`devbox` **`rm`** *`<pkg>`*
Remove a package

`devbox` **`install`**
Install all packages without a shell

`devbox` **`search`** *`<pkg>`*
List matching packages and versions

`devbox` **`info`** *`<pkg>`*
Show package and plugin info

PROJECT SETUP (cont.)

`devbox` **`update`**
Update all packages within their version tags

`devbox` **`update`** *`<pkg>`*
Update only the named packages

python@3.11 moves to the newest 3.11.x patch release.

`devbox` **`add`** *`<pkg>`* **`-p`** *`<platform>`*
Install only on given platforms

`devbox` **`add`** *`<pkg>`* **`--allow-insecure`**
Allow a package flagged insecure

SHELL AND RUN

`devbox` **`shell`**
Start a shell with your packages

`devbox` **`shell --`** *`<cmd>`*
Run one command in the environment

`devbox` **`shell --pure`**
Isolated shell, almost no inherited env

HOME, USER and DISPLAY are kept.

`devbox` **`shell -c`** *`<dir>`*
Use the devbox.json in another directory

`devbox` **`shell -e`** *`<KEY>`*`=`*`<val>`*
Set a variable inside the environment

SHELL AND RUN (cont.)

`devbox` **`shell --env-file`** *`<file>`*
Load variables from a file

`devbox` **`shell --print-env`**
Print a script that sets up the environment

`devbox` **`run`** *`<script>`*
Run a script from devbox.json

`devbox` **`run`** *`<cmd>`*
Run any command inside the environment

`devbox` **`run -e`** *`<KEY>`*`=`*`<val>`* *`<script>`*
Run with extra variables

`exit`
Leave the devbox shell

DEVBOX.JSON

Packages (list form)

```
{
  "packages": ["go@latest",
"nodejs@20"]
}
```

Packages (map form)

```
"packages": {
  "busybox": {
    "version": "latest",
    "platforms": ["x86_64-
linux"]
  }
}
```

Environment variables

```
"env": {
  "APP_ENV": "dev",
  "BIN": "$PWD/bin"
}
```

DEVBOX.JSON (cont.)

`"env_from": "`*`<path>`***`.env"`**
Load variables from a .env file

Values set in devbox.json win over the .env file.

Init hook

```
"shell": {
  "init_hook": ["echo Welcome",
"export FOO=bar"]
}
```

Scripts

```
"shell": {
  "scripts": {
    "test": "go test ./...",
    "ci": ["go vet ./...", "go
test ./..."]
  }
}
```

`"github:`*`<owner>`***`/`***`<repo>`***`"`**
Use a Nix flake as a package source

init_hook runs every time a shell starts, so keep it fast and idempotent.

SERVICES

`devbox` **`services ls`**
List available services

`devbox` **`services up`**
Start all services with process-compose

`devbox` **`services up`** *`<svc>`*
Start only the named services

`devbox` **`services up -b`**
Run services in the background

SERVICES (cont.)

`devbox` **`services start`** *`<svc>`*
Start a service (all if none named)

`devbox` **`services stop`** *`<svc>`*
Stop a service (all if none named)

`devbox` **`services restart`** *`<svc>`*
Restart a service

`devbox` **`services up --process-compose-file`** *`<path>`*
Use your own process-compose file

Packages with a plugin (postgresql, redis, nginx, ...) expose ready-made services; others need a process-compose.yaml next to devbox.json.

GENERATE AND GLOBAL

`devbox` **`generate direnv`**
Write an .envrc that loads the environment

`devbox` **`generate dockerfile`**
Dockerfile that replicates devbox shell

`devbox` **`generate devcontainer`**
Create .devcontainer/ files for VS Code

GENERATE AND GLOBAL (cont.)

`devbox` **`global add`** *`<pkg>`*
Install a package for all projects

`devbox` **`global shellenv`**
Print shell code adding global packages to PATH

Add eval "$(devbox global shellenv)" to your shell rc file to use global packages everywhere.

RECIPES

Start a project

```
devbox init
devbox add python@3.12
postgresql@16
devbox shell
python --version
```

Auto-load with direnv

```
devbox generate direnv
direnv allow
# entering the directory now
loads the environment
```

Scripts and CI

```
# devbox.json:
shell.scripts.test
devbox run test
devbox run -e CI=1 test
```

Services in the background

```
devbox services up -b
devbox services ls
devbox services stop
```

Containerize

```
devbox generate dockerfile
docker build -t myapp .
```